## Natural Communities of Louisiana

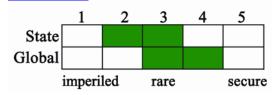






### **Vegetated Pioneer Emerging Delta**

Rarity Rank: S2S3/G3G4



Synonyms: Delta Flats, Emergent Islands

**Ecological Systems:** CES203.470

Mississippi Delta Fresh and Oligohaline Tidal Marsh

### General Description:

- A dynamic community forming primarily within the actively building
  - delta region at the mouth of the Atchafalaya and Mississippi Rivers
- Soils are formed from course to fine-grained alluvial deposits
- Hydrologic regime ranges from intermittently exposed to intermittently flooded
- Zonation of plant species occurs on the newly accreted land
- Naturally deposited island soils contain a greater percentage of sand and are therefore better drained than marsh soils
- The pioneer ridge vegetation is similar to the sand bars and delta of the Mississippi River while the pioneer marsh vegetation is similar to that of fresh marsh areas
- The pioneer community is successional in nature and changes rapidly with time
- The new delta community's ecological functions are similar in nature to marsh and mudflat systems, serving as nursery grounds for fish and aquatic invetebrate species
- Supports high numbers of wintering waterfowl

### Plant Community Associates

### Common species dominate on higher elevations include:

Echinochloa walteri (coast cockspur grass)

### Common species dominating lower elevation tidally influenced zones include:

Sagittaria latifolia (broadleaf bulltongue) Sagittaria platyphylla (delta arrowhead)
Leptochloa uninervia (Mexican sprangletop) Cyperus difformis (variable flatsedge)

Eleocharis parvula (dwarf spikerush)

### Common species dominating intermediate zones include:

Sagittaria platyphylla (delta arrowhead) Cyperus difformis (variable flatsedge)
Bacopa monnieri (coastal water hyssop) Eleocharis parvula (dwarf spikerush)

Leptochloa fusca ssp. uninervia (Mexican sprangletop)

### Other common species include:

Salix spp. (willow)

Typha latifolia (common cattail)

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### Other common species continued:

Scirpus validus (softstem bulrush) Juncus effusus (soft rush) Scirpus americanus (threesquare bulrush)

### Federally-listed plant & animal species:

Pelecanus occidentalis (brown pelican) Haliaeetus leucocephalus (bald eagle)

Trichechus manatus (manatee)
Chelonia mydas (green sea turtle)
Eretmochelys imbricata (hawksbill sea turtle)
Lepidochelys kempii (Kemp's Ridley sea turtle)
Dermochelys coriacea (leatherback sea turtle)
Caretta caretta (loggerhead sea turtle)

Endangered, PS:E; G4; S2

Bald & Golden Eagle Protection Act;

G4; S2N, S3B

Endangered; G2; SZN

Threatented/Endangered; G3; SZN

Endangered; G3; SZN Endangered; G1; SZN Endangered; G2; SZN Threatened; G3; S1

### Range:

There are two areas of the Louisiana coast supporting this habitat: the actively forming Atchafalaya Delta and the current mouth of the Mississippi River.

### LA River Basins:

Mississippi, Atchafalaya

#### Threats:

- Channelization and dredging
- Frequent and prolonged fluctuations in river water levels

### Beneficial Management Practices:

- Allow natural alluvial deposition processes to continue delta formation
- Identify and protect sensitive areas from disturbances such as boats or other motorized vehicles and recreational use
- Develop better strategies for the placement of dredge materials as a restoration method

